ceptible effervescence. A piece of bibulous paper, moistened with solution of acetate of lead, is to be inserted into the neck of the flask, so as almost to close it. The whole is then to be set aside for several hours, after the lapse of which the paper is to be examined for the characteristic stains of sulphide of lead.

It is to be observed that there are two forms in which sulphur may find itself in the urine, apart from any direct administration of substances containing it. It is always present in the form of saline sulphates. Upon these substances nascent hydrogen has no reducing effect. But sulphur is contained also in albumen, which in certain forms of disease may be present in the urine. The formula of albumen, according to Liebig, contains three equivalents of sulphur, amounting to nearly two per cent. It appeared to me to be a matter of interest to determine whether albumen was capable of giving up a portion of its sulphur to the reducing action of zinc and chlorhydric acid, and thus to settle the question whether its presence could embarrass the investigation as to the presence of sulphites. A considerable quantity of albumen was introduced into a flask and exposed to the action of zinc and chlorhydric acid for many hours. An almost imperceptible stain was found upon the lead paper. Now the ingestion of one hundred grains of sulphite per day—less than the usual dose—I have found to be capable of charging the urine so heavily, with undecomposed sulphite, that lead-paper is visibly darkened in a few seconds, and by longer exposure becomes perfectly black. Whilst, therefore, albumen seems not entirely incapable of acting upon lead-paper, its influence is not such as to disturb the applicability of the test, inasmuch as an aqueous solution certainly containing ten times as much as could be found in a like bulk of albuminous urine, gave only almost imperceptible indications.

PHILADELPHIA, November 21, 1864.

ART. VII.—*Permanganate of Potash as a Remedy for Diphtheria.*

By LOUIS MACKALL, Jr., M. D., Georgetown, D. C.

HAVING used for several months past the permanganate of potash as a remedy for diphtheria, and being convinced of its great efficacy, I feel justified in calling the attention of the profession to the use of this agent in this fatal and hitherto unmanageable disease.

After using faithfully all the remedies both general and local which have been extolled for the cure of diphtheria, and having seen so little good result from their use, I had lost in great measure all faith in such remedies, and had come to the conclusion that the best treatment was to support the patient with nourishment and the free use of stimulants. On reading, in the January number of the *American Journal*, an article by Dr. Samuel Jackson on the therapeutical application of a solution of the permanganate of potash and of ozone, it occurred to me that this agent might be beneficial in the treatment of diphtheria. Shortly afterwards I had an opportunity of making a trial of it in a severe case. A young girl about eleven years of age was seen by me after being sick several days. The tonsils, soft palate and fauces were covered with an ash-colored deposit; the glands beneath the jaw were much swollen, with frequent pulse and hot skin; she was treated for several days with chlorate of potash and the tincture of the chloride of iron. Muriatic acid and tincture of iron in equal parts, were applied locally. But finding the disease on the increase, I changed this treatment and used the permanganate of potash both internally and as a local application, the latter in the proportion of ʒj to water Oj. She took a teaspoonful every three hours of the strength of ʒj to water Oiss. On the second day after beginning this treatment, the improvement was very marked, and she speedily recovered. The false membrane was detached and the mucous membrane presented a healthy appearance in three or four days.

Since then I have treated all the cases of diphtheria (some fourteen or fifteen) which I have seen with this agent, and am more and more convinced with every case, that we have in the permanganate a most valuable remedy. Such is my faith in its power to arrest the extension of the pseudo-membranous formation, and to remove it when formed, that I now feel little apprehension in any case if called to see the patient before the disease has extended to the larynx or paralysis has occurred. Indeed, in those almost hopeless cases in which it is evident that the disease has reached the larynx, as shown by suppressed cough and voice with paroxysms of intense dyspnœa, I have seen under its use three children recover. With a considerable experience in the disease I had previously known only one child to recover under similar circumstances. These three cases were all of the most unfavourable character; the membranous formation was abundant; the laryngeal symptoms very distressing. In all of the cases I expressed a very gloomy prognosis, as all similar cases with the one exception above mentioned had proved speedily fatal. In these cases I also used emetics, but I think the successful result should be attributed to the permanganate, as I had used emetics in all such cases before without benefit.

When the disease has extended beyond the reach of this remedy locally applied, of course a successful result could not reasonably be expected from its use; but I believe that with this agent we can prevent diphtheria from progressing to a fatal termination provided the cases can be attended to before the larynx becomes involved.

Its tendency to attack the mucous membrane of the pharynx prior to its extension to the larynx is characteristic of diphtheria, and I feel assured from my experience that if the permanganate of potash is used in this stage, that it will not only control its further development but will speedily remove all traces of the disease by restoring the mucous membrane of the throat to a healthy state.

The inferences that it is intended should be drawn from the foregoing remarks are: that if diphtheria arises from a specific cause affecting the whole system, then the permanganate of potash may be regarded as the antidote to this poison; or if the fatal tendency is thought to be caused by or to be dependent on the local affection of the throat, then the local affection may be removed and the fatal tendency may be obviated by the use of this remedy.

It may be well to state that I have never seen any unpleasant effect from the use of the permanganate even when administered to young infants (the solution should be weakened by increasing the quantity of water to Oij to permanganate ʒj in very young children); and I have observed that when locally applied it causes less distress than almost any other remedy.

GEORGETOWN, D. C., Oct. 22d 1864.

ART. VIII.—*Statistics of Ovariotomy for the years* 1860–61, '62, *and* '63. *Including* 150 *cases.* By E. R. PEASLEE, M. D., LL. D.

THE following collection includes only the cases of ovariotomy which have been *published* during the four years above mentioned. I have, therefore, to regret the omission of the more recent cases of several ovariotomists in this country, and especially of those of Dr. W. L. Atlee, whose individual experience would so much enlarge this list.

In an appendix to his translation of Kiwisch's *Treatise on Diseases of the Ovaries*, Mr. J. Clay, of Birmingham, collected *all* the reported cases of ovariotomy up to the commencement of the year 1860, amounting to 425 completed operations. The following collection is, therefore, a continuation of his, up to the beginning of the year 1864, and includes 150 cases. I have omitted several cases reported too soon after the operation to give certain information as to their result; and have included no case in which the operation was not completed. The few cases not before reported, I obtained directly from the operators themselves. Some of the following cases are too meagrely reported to be of any statistical value, except so far as the result is concerned; and it is hoped that future reporters will be more explicit. I have included the most important practical points under specific heads; and shall allude to others also in the analysis which follows the cases.